









1 JAN 1954

ANNUAL REPORT  
AND  
TRANSACTIONS  
OF THE  
YORKSHIRE  
PHILOSOPHICAL SOCIETY  
FOR THE YEAR  
1952



PRESENTED TO THE ANNUAL MEETING,  
20th APRIL, 1953.

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PRINTED BY ORDER OF THE COUNCIL.

1953.



THE interests of THE YORKSHIRE MUSEUM are primarily devoted to Natural History and Archaeology. Its fine collections cater not only for the general public, but also for specialist students in these two branches of cultural activity.

The Keeper would be interested to hear at all times of collections, large or small, which other institutions or private persons may have for disposal, and which could be used to extend the educational facilities already afforded the archaeologist, systematist and biologist at THE YORKSHIRE MUSEUM.

# The Yorkshire Philosophical Society.

(Founded 1822.)

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The President, the Hon. Secretary and Hon. Treasurer are  
*ex-officio* members of all Committees.



# REPORT OF THE COUNCIL

## OF THE

# YORKSHIRE PHILOSOPHICAL SOCIETY

## FOR 1952.

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The Council presents its report on its activities during the year 1952.

The matter which has chiefly engaged the attention of the Council has been a review of the Society's present position. In a Society founded 131 years ago, it is desirable that its work should be reviewed from time to time so that its original objects should function in accordance with modern needs and standards. This has been brought to the Council's notice more forcibly by a report given to them by the Keeper which has pointed out that there are no grounds for complacency in the deficiencies which exist in the structure of the Society.

The last 40 years have seen two major wars with all the dislocations—financial and professional—that follow, and the tendency has been for the Council to content itself with meeting its difficulties (and they have been many) as and when they arise, to the detriment, perhaps, of a more forward policy. Such a position, the Keeper reminds us, cannot continue, and in future a more active policy must be pursued if the Society is not to stagnate.

There are two policies to consider which can nevertheless be pursued concurrently. The first is to make up the leeway which has accumulated in the past, and the other is to consider all possible means of enlivening the future. To meet the first the Council nominated a committee under the chairmanship of Mr. Wilfred Taylor (whose services in this way they greatly appreciate) to consider the reconstruction and re-arrangement of the Society's existing facilities. Some of these are already in hand, and are referred to below. The other plan is under active consideration at the present time by the formation of a number of committees, each dealing with a specific aspect for the future policy of the Society.

Dealing in detail with the year's activities, it is hoped that the new Mammal Room will be ready in time for the Annual General Meeting, and the work has already commenced in the Fish Room, where electric light has been fitted and new cases prepared. The geological collections have been packed and accommodation has been prepared for their storage. In all these undertakings, however, lack of staff has made work slow and difficult.

The ultimate cause of our present troubles is, however, not so much a shortage of funds, as a lack of enthusiasm for the objects of the Society. Now that the members of the Council have been made aware of their responsibilities they hope during the coming year to study ways and means for establishing the Society on a sounder basis, whereby it may be of greater service to the community in promoting natural history and archaeology in the County of Yorkshire. A further step forward will be made when not only the Society as a whole, but the citizens of York are aware that there are no grounds for complacency, either in their past record or the present state of the Museum, and that only by active co-operation can the objects of the Society—the prerequisite for the Society's survival—be maintained. Meanwhile if each member could bring in one new member during the coming year, it would give a breathing space, during which the reorganization could take place, and a policy for the future could be decided.

During the year, through the efforts of the Society, an Early Iron Age site at Driffeld has been excavated, and the Society has assisted with organizing the excavations of the Thornborough Circle. Mr. L. P. Wenham has continued his excavations at the Roman cemetery in Trentholme Drive, and Mr. Ramm has investigated one of the Roman Camps recently discovered near Clifton aerodrome. Boys from Bootham School, and some of our members, have cleared part of the South Wall of the Nave and the adjoining Cloister of St. Mary's Abbey, and have brought to light part of a large early fourteenth century figure of Christ, and the foundations of an early third century building and a first century hut, as well as a Roman Road. In so doing they have carried out work recommended by the Ministry of Works twenty years ago.

The medieval collections have been increased by gifts of a weight from Malton, given by Sir Edward Whitley, and a pilgrim Ampulla from Market Weighton, given by Mr. Williams. Steady work has been done on the medieval collections, and attention is drawn to the exhibition of seal matrices, including the fine one from Meaux Abbey and that of Archbishop Waldby.

The gallery of medieval architecture has been cleared of a large accumulation of third rate stone carving, and the thanks of the Society are due to Mr. Stuart Syme, F.S.A., for his generosity which has made this work possible. A new scheme for the better exhibition of our magnificent thirteenth century figure sculpture has been prepared, and it is hoped that during the next few months it will be possible to make an announcement on this subject.

Mr. Geoffrey Thompson and Mr. Gelson Walker have continued the arrangement of the Society's Coin collections during the year, and have given great help in identifying coins and adding to our collections. Among a number of donations an Edward I Penny Type IX B1299-1300, minted at Hull and given by Mr. W. Foot Walker, and an Alfred the Great Penny, London monogram, in extremely fine condition, presented by Mr. A. C. Harrison, of Edinburgh, have been welcome additions.

In the Natural History Departments there is little to report beyond the reorganization of the Mammal Room and the Fish Room, except that the Flower Table, prepared each week by Miss C. M. Rob, F.L.S., has been one of the most attractive exhibitions in the Museum, and a delight to many visitors. The serious study of Natural History appears to continue to decline, and were it not for the faithful few like Miss Rob and Mr. Arthur Smith, it would appear almost unnecessary to have a natural history Museum in York where a dilettante minority so singularly fails to inspire an apathetic majority.

The thanks of the Society are due to Mr. Adam Gordon, who never fails in preparing bird skins and setting specimens.

The Society has acted as host to a number of kindred societies during the year, including the Royal Astronomical Society, the Newcomen Society, The Society of Antiquaries of Newcastle-on-Tyne, The Yorkshire Naturalists' Union, The Yorkshire Conchological Society and the Roman Antiquities Committee of the Yorkshire Archaeological Society.

The many distinguished visitors to the Museum include Lord Kilmaine, the Secretary of the Pilgrim Trust; Sir Herbert Craster, formerly Keeper of the Bodleian Library; Professor Sir Mortimer Wheeler; Professor Toynbee; Professor Ian Richmond; Professor Kennedy; Dr. North, the President of the Museums Association; Professor Bechman, Rector of Munster University; Professor Termer; Dr. Boase, President of Magdalen College, Oxford; Dr. D. Harden and Mr. C. W. Phillips.

Excursions to Stamford Bridge and Beverley Minster, and to the earth-works at Stanwick were much enjoyed by those present. It would be appreciated if members would send suggestions for future excursions to the Keeper.

There has been a full series of lectures which have been well attended, especially those that were open to other societies. The Keeper has, in addition, lectured in Bridlington, Selby, Leeds, Baldersby, Scarborough, Harrogate, Helmsley and London during the year.

Earlier in this report the difficulties of the present situation were stressed, and it is fitting that in conclusion an optimistic note should be struck. In the Society's field of operations—the archaeology and natural history of Yorkshire—much remains to be done. Scientific excavation has barely commenced in Yorkshire, much historical research needs to be done, many buildings, sites and objects need to be conserved in a period when the old landmarks are vanishing. The natural history of the county needs new investigation along new lines and with new methods. There is enormous scope for the Yorkshire Philosophical Society in conjunction with its sister societies in these fields. With enthusiasm and energy much could be done, provided we renew the vision of our first founders. The Society must go forward—otherwise it will go back. The matter cannot be left to the Council. The interest and enthusiasm of the *Members* is needed, and if the Council have their support the future may redeem the difficulties of the past. It is particularly necessary to increase the number of members, and the Council looks to the existing members to help by introducing their friends to the advantages of the Society and thus bring additional financial help.

The Council cannot conclude without paying their tribute to the work of the Keeper, Mr. G. F. Willmot, whose enthusiasm in the work of the Society, and zeal for its welfare, are deep and genuine. They look forward to a period under his guidance during which the original objects of the Society will bear a closer resemblance to the days of its initiation and early success.

## FINANCE

The accounts for the year 1952 show an adverse balance of £488 compared with a credit balance of £70 for the previous year. The difference is mainly accounted for by a rise granted on certain salaries and wages, whilst income in 1951 was greater by reason of the Festival.

## MEMBERSHIP

There were 58 new members for the year 1952, and deaths and resignations numbered 42. There has thus been a net increase of 16, and the membership on 31st December, 1952, was :

Honorary Members	...	...	...	...	17
Members	...	...	...	...	369
Lady Subscribers	...	...	...	...	3
Associates	...	...	...	...	1
Student Members	...	...	...	...	4
Ticket Holders...	...	...	...	...	52
					<hr/>
					446
					<hr/>

## MUSEUM LECTURES

1952

30th January. Antiquarian Writers.

Mrs. Jacquetta Hawkes, O.B.E., F.S.A.

(In conjunction with the Historical Association and the English Association.)

28th February. Two films: Birds of the Orkneys and Shetlands.

P. E. Brown, Director of Watchers and Sanctuaries of the Royal Society for the Protection of Birds.

22nd March. Eighteenth Century Gardens.

Miss Dorothy Stroud.

(In conjunction with the York Georgian Society and the Yorkshire Architectural and York Archaeological Society.)

5th July. The Excavations of the Iron Age Fort at Stanwick.

Professor Sir Mortimer Wheeler, M.C., M.A., D.Lit., F.S.A.

6th November. Film: Birds and Scenes in the Antarctic.

Dr. William J. L. Sladen, M.B.E.

METEOROLOGY.—Honorary Curator, Mr. A. Wentworth Ping, M.A., F.R.Met.Soc.

Recorder, Mr. A. Colley.

Statistics of Station: Longitude  $1^{\circ} 5' W.$ ; Latitude  $53^{\circ} 57' N.$ ; height above mean sea level, 56 feet.

*Rainfall.* Rain or snow fell to the amount of 21.20 inches as against 31.10 inches for 1951, a decrease of 9.90 inches, and 3.43 inches below the average of 24.63 inches for the preceding 50 years. The wettest months of the year were September 3.72 inches and October 2.44 inches. The driest months were February 0.38 inch and April 1.19 inches. The heaviest fall of the year occurred on 28th September when 1.02 inches was recorded.

*Temperature.* Temperature ranged from  $81^{\circ} F.$  on 17th and 18th May to  $20^{\circ} F.$  on 29th November; the range of temperature for 1952 being  $61^{\circ} F.$  as against  $56^{\circ} F.$  for 1951.

The mean temperature for the year (mean of max. and min.) was  $48.8^{\circ} F.$  as against  $48.6^{\circ} F.$  for 1951. July gave the highest mean with  $62.1^{\circ} F.$ , then August with  $61.0^{\circ} F.$  January and December were lowest with  $36.7^{\circ} F.$  and  $37.0^{\circ} F.$  respectively.

*Barometer.* A mean pressure of 1014.4 millibars (29.96 inches) (1000 millibars = 29.531 inches of mercury) at M.S.L. (corrected for diurnal variations) has been recorded as against 1010.9 millibars (29.85 inches) for 1951. February and July gave the highest mean with 1019.3 millibars (30.10 inches) and January the lowest with 1009.5 millibars (29.81 inches). The highest reading of the barometer of 1038.5 millibars (30.68 inches) was taken on 5th February, and the lowest 974.4 millibars (28.77 inches) on 17th December. The extreme range was, therefore, 64.1 millibars (1.91 inches) as compared with 69.4 millibars (2.05 inches) in 1951. All readings corrected to M.S.L.

*Winds.* Observations of winds at 9 a.m., G.M.T., show that during 1952 "strong" winds (force 4—8 Beaufort Scale) were recorded on 51 days as against 63 days in 1951. The winds observed were N.W. 87; W. 77; S.W. 65; S. 36; S.E. 31; N.E. 31; N. 21; E. 18.

*Thunder, Snow and Hail.* Thunder was heard on 14 days as against 10 days in 1951; snow or sleet fell on 23 days as against 18 days, and hail was recorded on 2 days as against 4 days the previous year.

*Sunshine.* Sunshine recorded at Bootham School amounted to 1367.4 hours as against 1331.5 hours in 1951, an increase of 35.9 hours. The daily mean was 3.73 hours.

THE YORKSHIRE PHILOSOPHICAL SOCIETY.

LIABILITIES.

31st Dec., 1951.  
£ s. d.

Capital Account.

		£	s.	d.	£	s.	d.
	Balance at 1st January, 1952	...	...	42757	0	2	
	Add:—Amount received from Tempest						
	Anderson Bequest	...	...	946	18	1	
	Amount received on Sale of Books	...		10	0	0	
42757							43713 18 3

Subscriptions paid in advance ... 55 2 9

Sundry Creditors ... 153 6 8

Income and Expenditure Account:

	Balance at 1st January, 1952	...	...	20	6	4	
	Add:—Amount received from Tempest						
	Anderson Bequest	...	...	747	16	2	
	Excursion Fund—Excess of Collections over cost of Excursions during the year	...		2	2	9	
				770	5	3	
	Less:—Excess of Expenditure over Income for the year	...	...	487	15	1	
20							282 10 2

Specimen Fund ... 16 2 10

Abbey Excavation Fund ... 14 17 0

Research Fund:

	Amount set aside	...	...	25	0	0	
	Less:—Amounts expended during the year	...		10	0	0	
							15 0 0

Midland Bank, Limited (Overdraft) ... —



BALANCE SHEET, AT 31st DECEMBER, 1952.

ASSETS.											
1st Dec., 1951.											
£ s. d.				£ s. d.				£ s. d.			
<b>Freehold Property and Land.</b>											
(Not valued for the purpose of this Balance Sheet)											
Museum Gardens and Museums.											
32 and 34, Bootham (Tempest Anderson Bequest).											
Manor Cottage											
St. Mary's Lodge.											
Baths Cottage, Marygate.											
10 Bootham.											
35 St. Olave's Road											
<b>Investments</b>											
TEMPEST ANDERSON BEQUEST (At Cost).											
£11,452 10s. 8d. 3½% War											
11183	8	9	Stock	...	...	...	...	11183	8	9	
2500	0	0	£2,500 York Corporation 2½% Loan	...	...	...	...	2500	0	0	
7967	11	0	£12,876 13s. 8d. 3% Treasury Stock	...	...	...	...	7967	11	0	
1509	8	10	£1,649 6s. 9d. 3½% Conversion Stock	...	...	...	...	1509	8	10	
8000	0	0	£8,000 Mortgage, Ings Property Company Ltd.	...	...	...	...	8000	0	0	
617	13	5	4% ... ..	...	...	...	...	617	13	5	
£621 7s. 2d. British Electricity 3% Guar-											
anteed Stock 1968/73 ... ..											
<b>At Conversion Value on 1st January, 1948.</b>											
900	0	0	£900 Rotherham Corporation Mortgage at 3%	...	...	...	...	900	0	0	
7377	5	0	£7,377 5s. 0d. British Transport 3% Guar-	...	...	...	...	7377	5	0	
anteed Stock 1978/88 ... ..											
<b>RAWDON BEQUEST (At Cost).</b>											
856	8	10	£935 17s. 10d. 3½% Conversion Stock	...	...	...	...	856	8	10	
<b>ST. QUINTIN BEQUEST (At Cost).</b>											
250	0	0	£247 11s. 2d. 3½% Conversion Stock	...	...	...	...	250	0	0	
<b>WM. DOVE BEQUEST (At Cost).</b>											
500	0	0	£500 3% Defence Bonds	...	...	...	...	500	0	0	
<u>41661 15 10</u>								<u>41661 15 10</u>			
Note—Market value at 31st December, 1952 = £37,737 9s. 7d.											
82	2	9	<b>Sundry Debtors</b>	...	...	...	...	107 10 0			
<b>Cash at Bank and in Hand</b>											
York County Savings Bank											
1611 12 1											
Midland Bank Limited											
67 11 9											
In Hand											
10 0 0											
1095	4	4					<u>1689 3 10</u>				
<b>Carried forward...</b>											
<u>2839 2 11</u>											
<u>£43458 9 8</u>											

THE YORKSHIRE PHILOSOPHICAL SOCIETY.

LIABILITIES.

31st Dec., 1951.																			
£	s.	d.	£	s.	d.					£	s.	d.	£	s.	d.				
43	45	7	14	5		Brought forward	...	...	...	...	...		44	25	0				

43	45	7	14	5								44	25	0
----	----	---	----	---	--	--	--	--	--	--	--	----	----	---

FUNDS FOR SPECIFIC PURPOSES.

WM. REED BEQUEST.

676	3	4	Balance at 1st January, 1952	...	...	...	674	7	5

H. J. WILKINSON MEMORIAL FUND.

205	1	6	Balance at 1st January, 1952	...	...	...	202	1	3
			Add:—Creditor for Expenses at						
8	4	8	31st December	...	...	...			
<hr/>									<hr/>
213	6	2							
			Less:—Excess of Expenditure over Income for						
			the year ended 31st December, 1952	...	...		9	14	3
202	1	3					<hr/>		
									192 7 0

£44	33	4	3	1				£45	11	1	8	9
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ALANCE SHEET, AT 31st DECEMBER, 1952—continued.

ASSETS.

st Dec. 1951.													
£	s.	d.	£	s.	d.						£	s.	d.
2839	2	11				Brought forward ...	...	...	...	...			
											43458	9	8
155	5	0				Payments in Advance ...	...	...	...	...	113	7	7
						Stock of Museum Publications No. 1							
			355	17	6	(At Cost) ...	...	...	...	...	338	6	6
			17	11	0	Less:—Sales to 31st December, 1952	13	5	6				
			—			Amount written off ...	...	...	36	14	6		
											50	0	0
338	6	6											
											288	6	6
						Stock of Coke on Hand at 31st December, 1952 (Estimated)	...	...	...	...	200	0	0
125	0	0											
						Carnegie Trust Fund							
						Expenditure during the year	...	...	...	...	190	13	11
3457	14	5									44250	17	8

FUNDS FOR SPECIFIC PURPOSES.

WM. REED BEQUEST (At Cost)

650	0	0	£579 12s. 5d. 4% Consolidated Stock (at cost)	650	0	0			
			Note:—Market Value at 31st December, 1952=£498 9s. 6d.						
			24 7 5	Cash at Midland Bank, Ltd.	...	18 14 1			
674	7	5							668 14 1

H. J. WILKINSON MEMORIAL FUND.

185	0	0	£164 8s. 6d. 4% Consolidated Stock (at cost)	185	0	0			
			Note:—Market Value at 31st December, 1952=£141 8s. 2d.						
			17 1 3	Cash at Midland Bank Ltd.	...	7 7 0			
202	1	3							192 7 0

### EXPENDITURE.

[illegible]



INCOME AND EXPENDITURE ACCOUNTS For the Year Ended 31st December, 1952.

Dr.		Gr.	
31st Dec. 1951.			
EXPENDITURE.		INCOME.	
To New Books and Binding	£ s. d.	Wm. REED BEQUEST.	
	24 19 7	£ s. d.	£ s. d.
		28 17 0	23 3 8
		...	...
		By Interest on £579 12s. 5d. 4% Consoli-	...
		dated Stock (Gross)	...
		By Balance being Excess of Expenditure	5 13 4
		over Income carried to Balance Sheet	
	<u>£24 19 7</u>		<u>£28 17 0</u>

H. J. WILKINSON MEMORIAL FUND

£ s. d.	£ s. d.	£ s. d.
17 16 5	16 15 9	6 11 6
To Herbarium Expenses	...	...
	...	...
	By Interest on £164 8s. 6d. 4% Consolidated	...
	Stock (Gross)	...
	By Balance being Excess of Expenditure	9 14 3
	over Income carried to Balance Sheet	
<u>£17 16 5</u>	<u>£16 5 9</u>	<u>£16 5 9</u>

REPORT OF THE AUDITORS TO THE MEMBERS OF THE YORKSHIRE PHILOSOPHICAL SOCIETY

We have examined the foregoing Balance Sheet and Income and Expenditure Accounts with the Books and Vouchers of the Society, and certify the same to be in accordance therewith. We have verified the Cash Balance and Investments.

8, Coppergate, York.  
28th January, 1953.

CREEER, ETTY, RANK & Co.  
Chartered Accountants



TRANSACTIONS  
OF THE  
YORKSHIRE PHILOSOPHICAL SOCIETY,  
1952.

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ROMAN CAMPS ON BOOTHAM STRAY, YORK  
By H. G. RAMM

Early in 1952 Mr. S. Climpson and myself, while looking through some air photographs (*Plate 1 A & B*), noticed what looked very much like two Roman camps on Bootham Stray, a few hundred yards from the "Bumper Castle" inn and on the main road from York to Helmsley and about a mile and a half from the N.W. gate of the Roman fortress. A visit to the site and air photographs specially taken subsequently confirmed the existence of these camps.

A survey of both camps was made as far as possible on the ground and in connection with this a section was made across the rampart and ditch of the easterly camp, with the permission of the City Corporation and the co-operation of the tenant, Mr. H. Yates, of Fountayne Street, to establish the nature of the defences. A thorough excavation of the site was beyond the resources available and probably would not indeed be profitable. It would be useful another season by trenching to establish the exact course of that part of the second camp which cannot be traced on the air photograph or the ground.

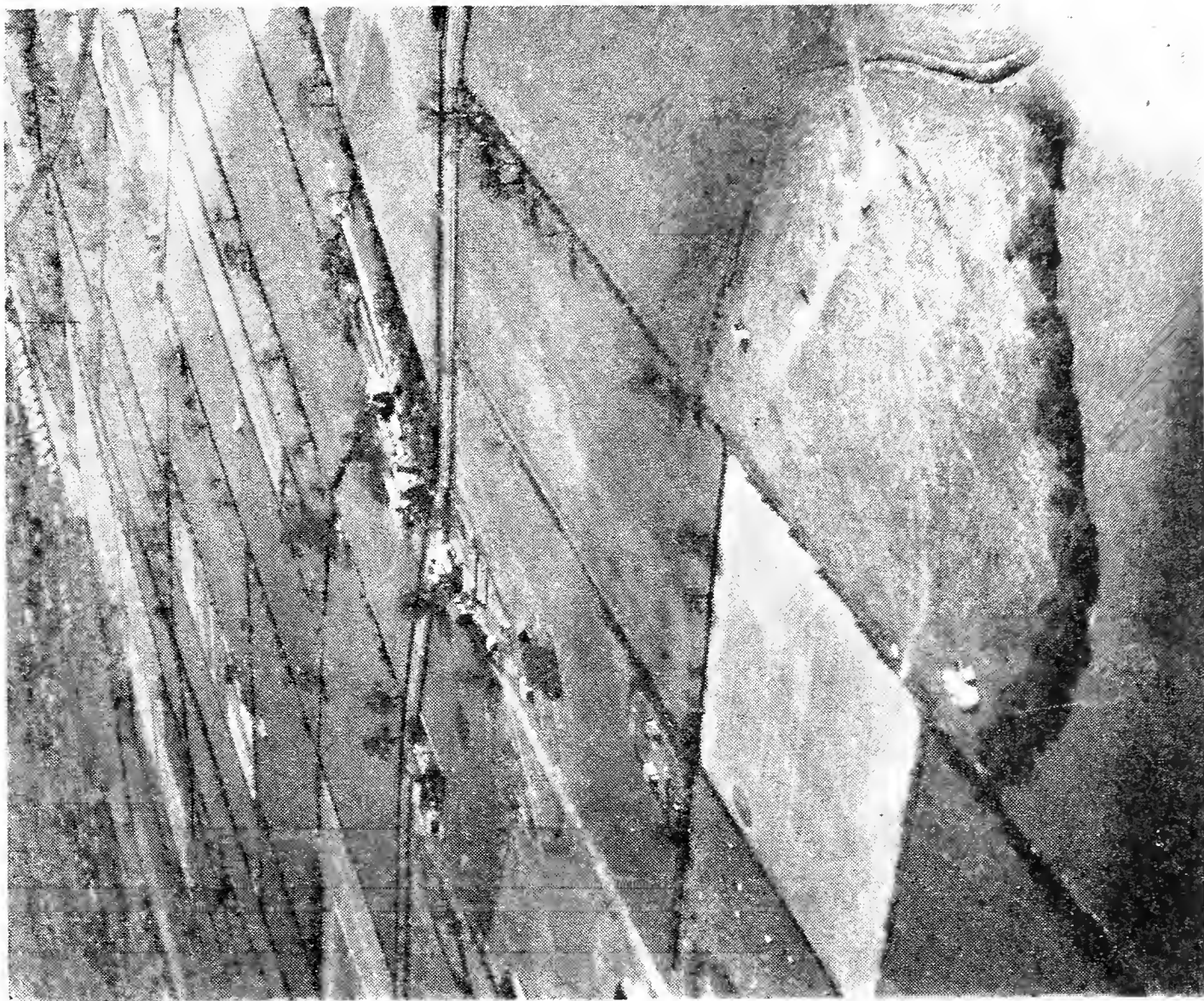
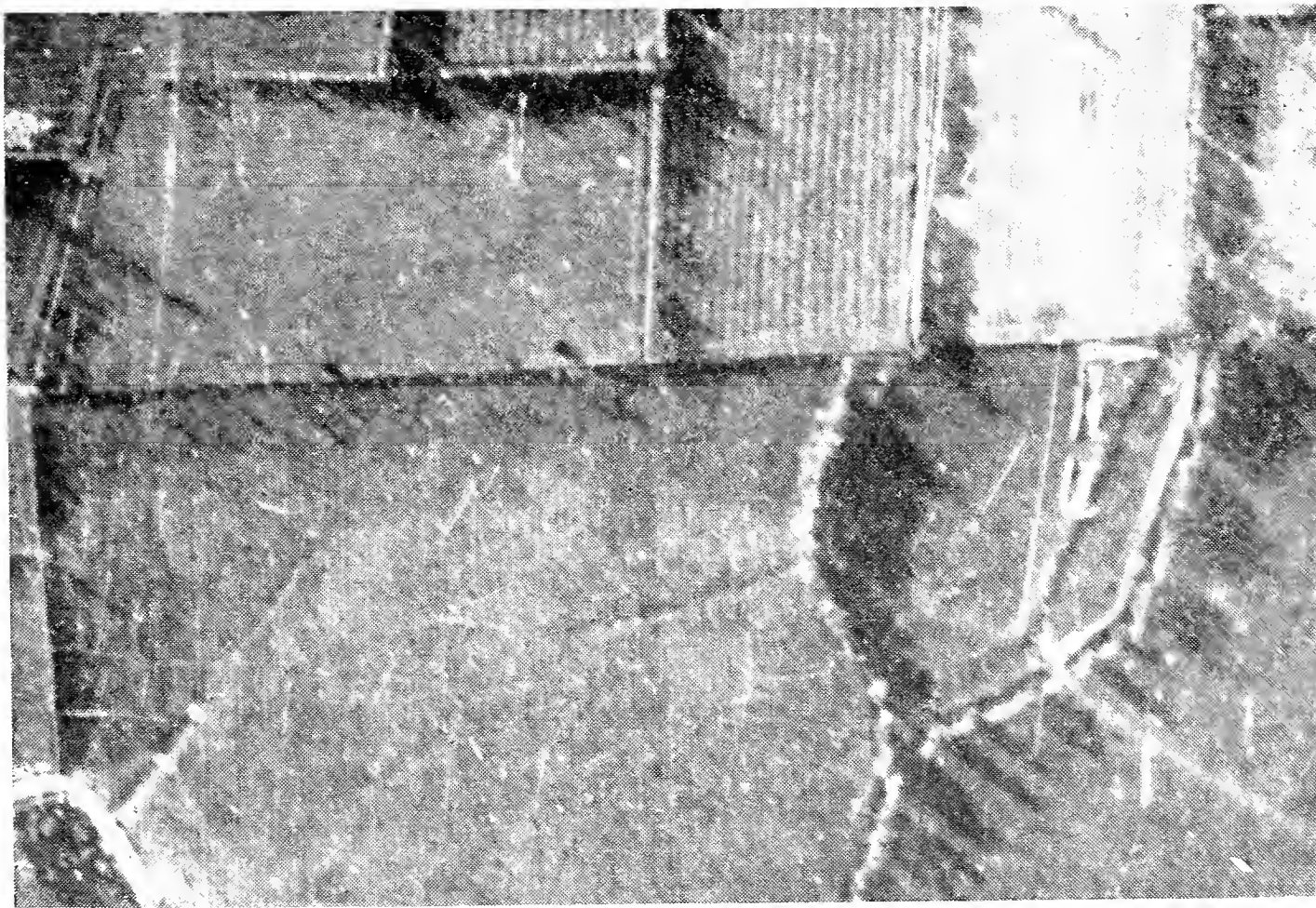
The first camp lies mainly on Bootham Stray, a mediaeval common, but overlaps on to what up to the early 18th century were known as half year lands (i.e., were used for half the year as arable and the other half as common land), and on early 19th century maps as the new intakes. The second camp lies wholly within this area, Fig.1. Traces of pre-enclosure ploughing survive in the form commonly known as rig and furrow and it is surprising that any trace of the camp at all should survive on land which has been ploughed for so long. Bootham Stray itself is now arable land with the exception of the small field in which is the first camp. This field, within the fork of two ditches which later join to form the Bur dyke, is rough and often waterlogged. In fact the drainage of this flat clay land must always have presented a problem, as the many traces of old drainage ditches visible on the air photographs bear witness, as well as many references in the City records. This particular spot is known locally as the "Old Camping Ground", presumably because the raised embankment of the Roman camp provided a dry place for gypsies and other migrants to bivouac.

The camps were known in the 18th century. Stukeley (*Letters and Diaries III*, *Surtees Soc.*, Vol. 80, 180) mentions one of them in his diary (entry dated 28th June, 1740), "a mile and a half of York we crosst a Roman camp upon the common". Stukeley and his friends were on their way to "Molesby Nunnery" (Moxby Priory) a little north of Sutton in the Forest. At this date the turnpike road was not yet in existence and there was not much more than a track across the common or moors, whose course varied according to the weather and time of the year. A manuscript note by Drake to his own copy of *Eboracum* in the margin of p. 37 reads: "I lately discovered in the forrest about a mile from the city three camps, the largest of them very near and opposite to a farmhouse

now known by the name of Kettlestring's house. They lye and are of the dimensions and form as they appear in the plan. I take them by their shape to be certainly Roman, in all probability thrown up as a guard to the road, which coming through so vast a Forrest an enemy might come up to and surprise the city on this side without such a security. The present road to Sutton on the Forrest, Creyk, etc., lyes close by these encampments and in summer time through the largest of them." Kettlestring Farm is a name still applied to a farm near the camps. This MS. note has been rather vigorously crossed out, perhaps because Drake changed his mind about their being Roman. In a letter to Stukeley (19th June, 1742, *Stukeley's Letters, etc.*, III, 351/2) enclosing an account of the finds made during the widening of the Mount (see *York Courant*, 29th June 1742), Drake refers not to three but to seven or eight camps. Stukeley visited York in 1725 also and as we know from the *Itin. Curiosum*, Cent. II, 75, and had looked at the remains of the Civil War fort on the Mount. This Drake (*Eboracum*, 245) believed to be Roman. Stukeley had no hesitation in recognising it as a Civil War fort and that he was right is evident from the plan on the late 17th century map by Archer in the York Public Library. In the widening of the road on the Mount in 1742 the ramparts of this fort were cut through and a quantity of bones and some Roman finds were discovered. Presumably these bones had been disturbed when the ditch of the fort was dug into the Roman cemetery underlying the Mount and were thrown up thence into the fort. But Drake did not realise this and writes to Stukeley almost with an air of triumph. "You said," he writes, "you could not declare it Roman. Pray what people, custom or accident could bring so many human bones together? They cannot be Christian unless they died of the plague and then I think they would not have been buried on a hill and so near the surface." Stukeley, in pointing out that the Mount fort was not a Roman camp, had probably referred to the true Roman camp which he had noticed on his ride to Moxby. Drake adds to his triumph by suggesting that this camp was not Roman and continues in his letter, "The camp you mentioned I have had measured and planned, but there are many more of them near one another in the same moor. I counted no less than seven or eight of different sizes. The country people in the forest have a tradition that they were only thrown up to keep their cattle in at night to guard them against wolves and other ravenous beasts and were fenced off by pales for that purpose." But Stukeley was as usual right. Drake's plan apparently has not survived, which is a pity. Since the 18th century the camps were forgotten and lost until their present rediscovery.

*Camp No. 1.* The rampart of the first camp can still be traced in the rough grass and stands to a height of one foot to eighteen inches. The eastern side is now used to provide firm standing for a farm track and the entrance on this side, visible on air photographs, has recently been destroyed. The south side survives in its entirety and also the west side, except where there is a building on it in the N.W. corner of the field. To the north the camp extends into what is now a ploughed field, where the course of its rampart is clearly visible as a band of lighter soil even at ground level. The area enclosed is approximately three acres, the plan rectangular with rounded corners. Evidence exists of 3 entrances (see plan, Fig. 1, and air photograph) in the centre of the north and south sides and north of the centre of the east side (now destroyed); the site of an entrance on the west side is occupied by a junction of field boundaries. All entrances are protected by the rampart turning in to form a claviculum.





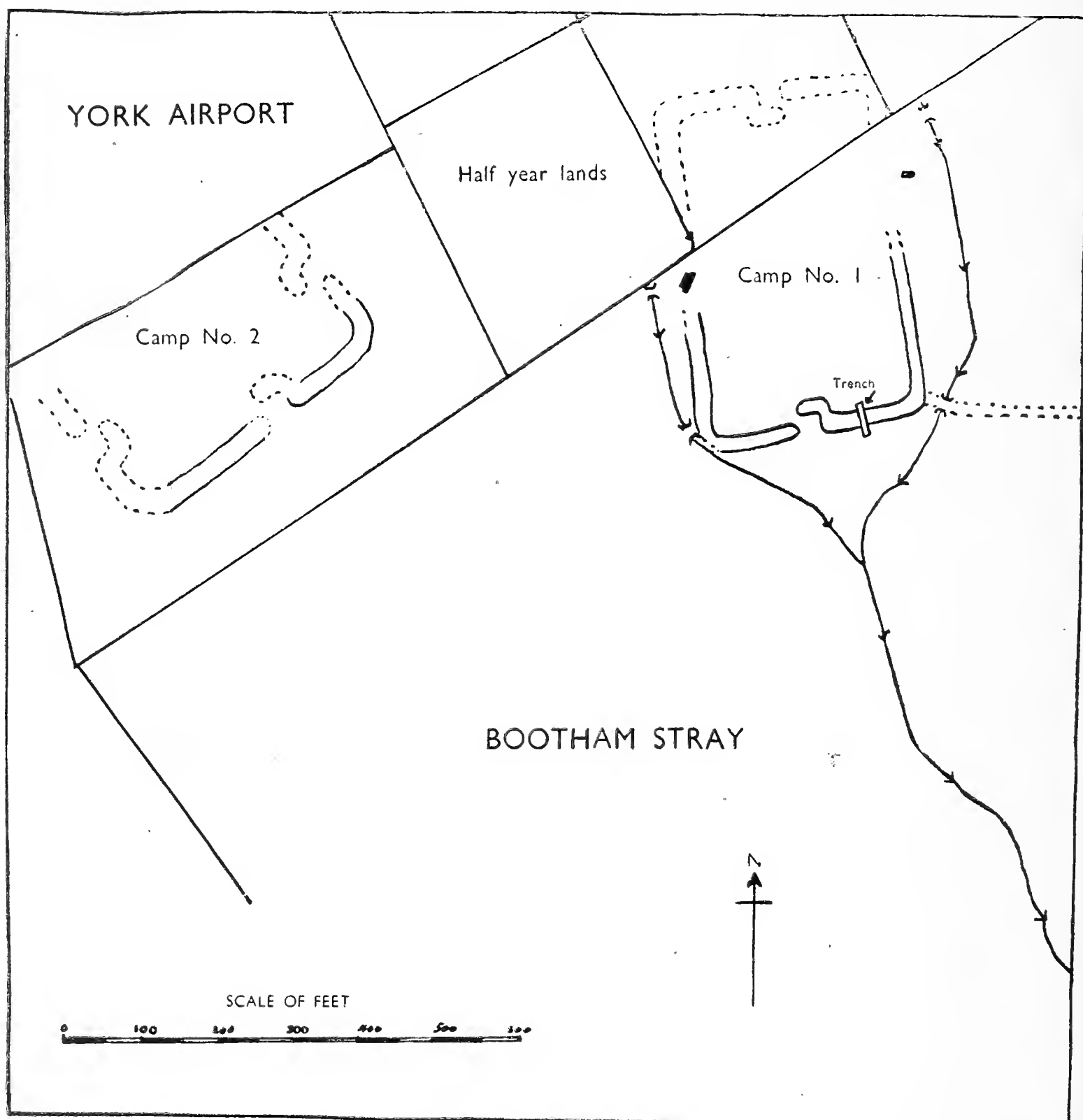
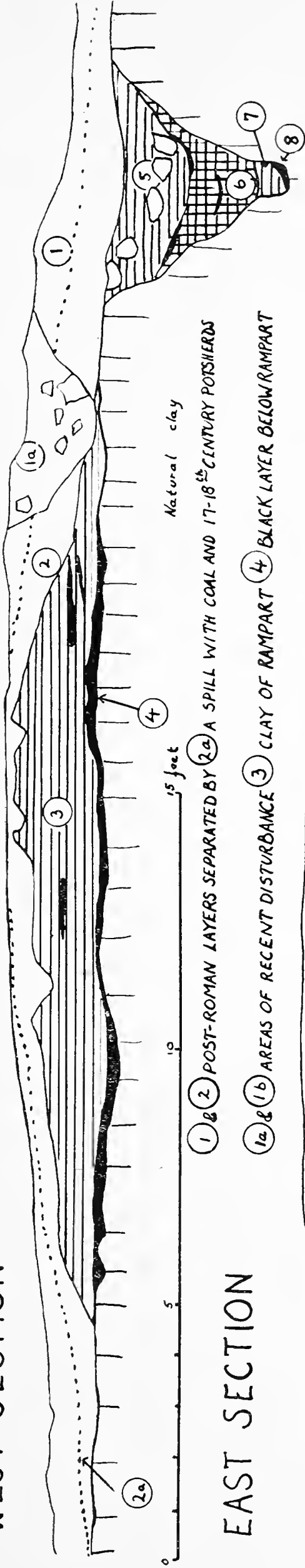


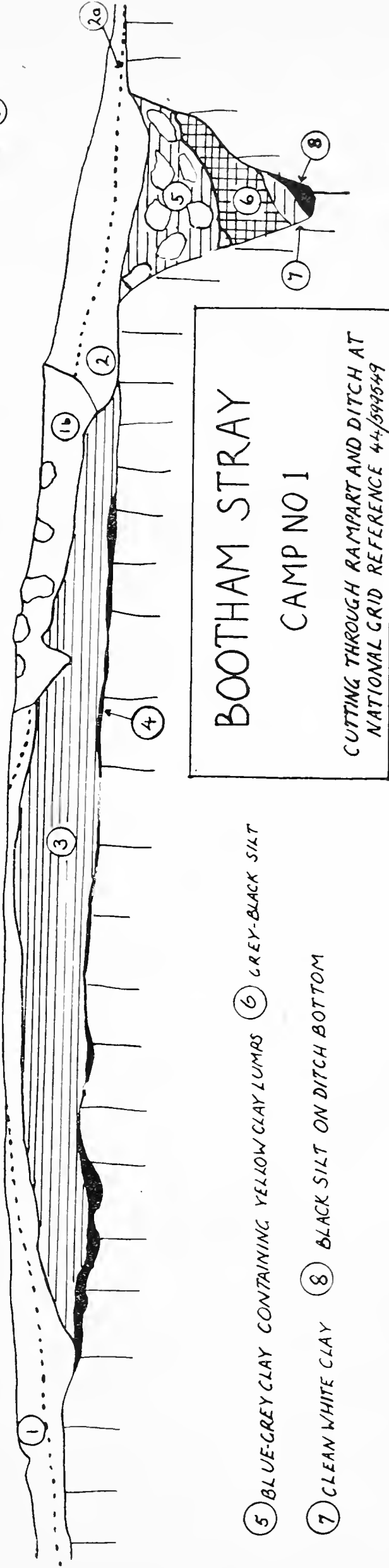
FIGURE 1.

The rampart, Fig. 2, as it stands at present has an average width of between 20 and 25 feet and the section put across it shows that the original width was 18 feet, the present mound covering the ditch as well as the rampart. The rampart is made up of the stiff, heavy boulder clay natural to the area and it is probably the stiffness of the clay which has made traces of the camp so difficult to eradicate even after centuries of ploughing. The clay rampart did not preserve any particular shape but, as existing now, consisted of a low mound of clay of a maximum height of 1 foot 10 inches above the Roman level. This was marked by a thin black layer, in some cases little more than a stain on the surface of the natural clay, containing a considerable amount of small pieces of carbonised wood; the black layer conveniently separated the clay of the rampart from the natural clay on which it stood.

# WEST SECTION



# EAST SECTION



## BOOTHAM STRAY

## CAMP NO 1

CUTTING THROUGH RAMPART AND DITCH AT  
NATIONAL GRID REFERENCE 44/599549

5 BLUE-GREY CLAY CONTAINING YELLOW CLAY LUMPS 6 GREY-BLACK SILT

7 CLEAN WHITE CLAY 8 BLACK SILT ON DITCH BOTTOM

FIGURE 2.



The rampart was separated from the ditch by a small berm about a foot and a half wide. The ditch itself varied in width at the lip from 4 feet 2 inches to 4 feet 8 inches and was of the normal V shape, with square drainage channel at the bottom, 7 inches wide. The depth of the ditch from the lip was 3 feet 8 inches. The excavation trench was extended 6 feet further south than is drawn on the section and the fact was established that there was no second ditch. The clay dug from the ditch was presumably thrown up to form the rampart; the section of the rampart, however, has twice the superficial area of that of the ditch. The difference may in part be explained by the fact that the clay in the rampart could never be as firmly compressed as it was in its natural state. The ditch filling to half the depth consisted of a dark silt containing a considerable proportion of decayed vegetable matter and manure, above which was a layer of clay, extremely difficult to distinguish from the natural clay of the ditch sides, and containing lumps of yellow clay, perhaps fallen or thrown in from the rampart above. No artifacts of any kind were found in the rampart or ditch (with the exception of two microscopic flakes of orange brick or pot). The only definitely Roman artifacts occurred outside the ditch on the surface of the natural clay and consisted of a tiny and very much abraded fragment of Samian and a portion of the handle of a glass flagon.

*Camp No. 2.* This camp was some 400 feet west of Camp No. 1, is on a slightly different alignment and was probably smaller. All that now survives of it, the south side, and possibly the greater part of the east and west sides, is in a pasture field adjoining York aerodrome. Although showing the rig and furrow of pre-enclosure ploughing, the rampart shows clearly on the air photograph and with the long shadows of early morning or evening the south side can be easily seen on the ground, particularly at the S.E. corner. Apart from its smaller size, the camp seems similar in most respects to No. 1. The exact extent of the camp northwards into the aerodrome is not certain as there are no traces on the ground or air photograph.

#### THE PURPOSE OF THE CAMPS.

The camps conform to the pattern of the normal Roman marching camp, put up without any expectation of permanency and probably used for one night only (see Collingwood, *Archaeology of Roman Britain*). Drake's idea that they were a permanent guard to the approach to York from the north can at once be regarded as out of the question. As camps put up by operational troops on the move they seem strange as the site is a bad one; except in dry weather it tends to be water-logged, is without tactical advantage and is so near to many better sites on the York moraine. That the site should have been visited not once but certainly twice and probably seven or eight times is to say the least surprising. It seems better to consider them practice camps put up by troops from the neighbouring depot at York as an exercise, as has been suggested was the case at Cawthorne Camps (North Riding) and the small fortlets outside Haltwhistle Burn fort in Northumberland.

#### NOTES ON THE AIR PHOTOGRAPHS.

(A) Vertical air photograph taken before the construction of Air Ministry buildings on the site during the last war. Note the eastern entrance now destroyed.

(B) Oblique air photograph taken from the south. The surviving parts of the camp do not show up well, but the northern side and the entrance with its claviculum show up particularly clearly as a soil mark in the ploughed field.

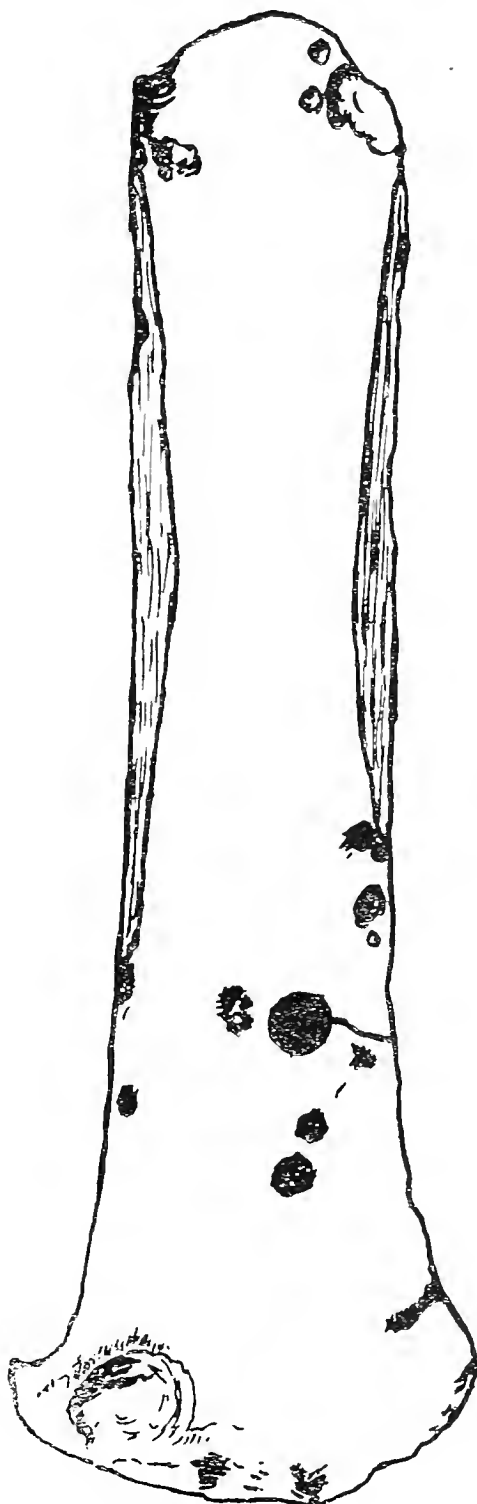


# A BRONZE AXE FOUND AT NEWBY, SCARBOROUGH

BY L. J. PARSONS

On the 1st April, 1952, whilst digging in a back garden of one of the houses recently erected on the Scalby Council's New Highfield Estate at Newby, the occupier dug out a clay covered metal object. Suspicions as to its character were aroused and the same was brought to the writer, who identified it as an early type of bronze axe. During building or levelling operations a bulldozer had been employed and the natural surface level had been altered and masses of clay were deposited over this strata. It was while digging out this overburden, the disturbed and undisturbed soil beneath, that the axe was located at the junction of the soil and the clay sub-soil. Apart from this data no accurate depths are known.

The position of the find is O.S. Map 25", 1930 Edition, Sheet Number LXXVII(II)—S.E.; Field No. 573; Lon.  $0^{\circ} 26.5'$ ; Lat.  $54^{\circ} 17' 23.6''$ ; Height 200'—250'.



The axe is a wing-flanged Celt with no stop-ridge or decorations. It is in rather poor condition, pitted by decay, abraded and damaged by digging.

The measurements (after preservation) are as follows:—

Total length, from blade to butt	...	...	...	...	12.3 cms.
Length of flanges—					
Left-hand side	...	...	...	...	7.0 cms.
Right-hand side	...	...	...	...	5.6 cms.
Height of flanges from body—					
Left-hand side	...	...	...	...	1.5 cms.
Right-hand side	...	...	...	...	1.35 cms.
Maximum width of blade	...	...	...	...	4.0 cms.
Thickness of centre section	...	...	...	...	2.4 cms.
Width of body at end of flanges	...	...	...	...	1.7 cms.
Weight after preservation, approx.	...	...	...	...	9½ ozs.

The axe undoubtedly belongs to the Middle Bronze Period, circa 1400 B.C.

#### *References.*

*The Archaeological News Letter*, Vol. 3, No. 9, March, 1951, page 150. 2 Celts from Cayton Carr—Find II, Coulson's Carr.

Scarborough Museum, black cast of Palstave (No. 16.49), original found near Hackness Road, Newby, Scalby.

It would appear to be a "stray", as during the earlier trenching for sewers and drains the writer inspected same but nothing was then discovered.

Many thanks are due to Mr. T. C. M. Brewster, of Flixton, for his treatment of this axe, and it has been handed to the Scarborough Museum.

## INTERIM REPORT ON THE 1952 EXCAVATION IN ST. MARY'S ABBEY

During 1952 work has commenced on clearing the south wall of the Nave of St. Mary's Abbey, and the opportunity has been taken of excavating the 3rd and 4th bays from the West End and the adjoining North Cloister walk down to subsoil level, in order to gain more information about the history of the site.

The earliest occupation is a wooden building lying under the North Cloister walk and the 3rd and 4th bays of the South Aisle. The clay floor of this building sealed a fragment of marbled ware hitherto unknown on a Flavian site and a rim of a footed platter (Drag 15-17), similar to a number found at Colchester (Reports of the Research Committee of the Society of Antiquaries of London, No. XIV, Pl. xxxix, s6A), and two fragments of early Romano-British coarse pottery. On the floor was a large quantity of pottery datable 80-120 A.D., and coins of Vespasian and Titus under Vespasian. There appears to be a gap in the occupation during the second century, and the next building consists of a robbed wall and a double cobbling which seals the first century wooden building. This wall contained nine tiles stamped LEG VI SEV, and presumably dates from the reign of Severus Alexander, 222-235. After the destruction of this building, a bank of large cobbles, probably a road, sealing coins of Septimus Severus and Julia Mamaea was laid down. Some fourth century pottery and Anglian sherds and a coin of Ethelbert II suggest later occupation in the immediate vicinity.

The thirteenth century Nave walls of Abbot Simon de Warwick, which are known to have been completed before his death in 1295, overlie deep rubble foundations which may belong to the Norman church founded in 1089.

A sleeper wall carrying the Nave piers is trench built and appears to belong to the thirteenth century. The Cloister wall looks like twelfth century work, and the West Cloister wall has been thickened and rebuilt, probably after the completion of the Nave.

The foundation of an abutment of worked masonry, 8'  $\times$  6' against the outside of the 4th bay of the Nave wall, apparently as the result of some damage to the main structure, was reminiscent of the wall of tracery found by Mr. Wellbeloved in 1829, below which the well-known figures of prophets and evangelists were discovered. Below this abutment a large portion of a figure of Christ, which fits two pieces found many years ago, was found lying face downwards and serving as a foundation. This abutment possibly relates to the damage to the Nave which is known to have occurred following the striking of the tower by lightning in 1377. The excavation is continuing, and volunteers from the Society will be welcome.

G. F. W.

PRESENTED

1 JAN 1954



FORM  
OF A  
BEQUEST TO THE SOCIETY.

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Every person desirous of bequeathing to the Society any sum of Money, Specimens, Books, Instruments, or other Property, is requested to make use of the following form:—

*I give and bequeath to the Trustees, for the time being, of the Society established at York, called “**The Yorkshire Philosophical Society,**” for the use of the said Society, the sum of \_\_\_\_\_ to be paid out of such part of my personal estate as I may legally charge therewith. [Or here enumerate the effects or property intended to be bequeathed.] And I direct that the receipt of the Treasurer of the said Society, for the time being, shall be an effectual discharge to my Executors for the said legacy.*











